=> d his

(FILE 'HOME' ENTERED AT 11:30:18 ON 21 DEC 2004)

FILE 'REGISTRY' ENTERED AT 11:30:23 ON 21 DEC 2004

L1 STRUCTURE UPLOADED

L2 . 0 S L1

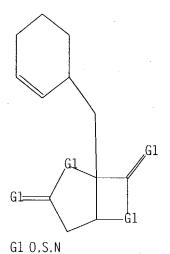
L3 7 S L1 FULL

FILE 'CAPLUS' ENTERED AT 11:30:52 ON 21 DEC 2004

L4 7 S L3

=> d que 14 stat

L1 STR



Structure attributes must be viewed using STN Express query preparation.

L3 7 SEA FILE=REGISTRY SSS FUL L1

L4 7 SEA FILE=CAPLUS ABB=ON PLU=ON L3

=> d 1-7 ibib iabs hitstr

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ANSWER 1 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER:
                         2004:701941 CAPLUS
DOCUMENT NUMBER:
                         141:224070
TITLE:
                         Preparation of 6-oxa-2-azabicyclo[3.2.0]heptane-3,7-
                         dione (salinosporamide) derivatives for inhibition of
                         proteasomes and treatment of proteasome-mediated
                         diseases
INVENTOR(S):
                         Stadler, Marc; Seip, Stephan; Mueller, Hartwig;
                         Mayer-Bartschmid, Anke; Bruening, Michael-Alexander;
                         Benet-Buchholz, Jordi; Togame, Hiroko; Dodo, Reiko;
                         Reinemer, Peter: Bacon, Kevin; Fuchikami, Kinji;
                         Matsukawa, Satoko: Urbahns, Klaus
                         Bayer Healthcare AG, Germany; et al.
PATENT ASSIGNEE(S): .
SOURCE:
                         PCT Int. Appl., 79 pp.
                         CODEN: PIXXD2
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
     PATENT NO.
                         KIND
                                DATE
                                            APPLICATION NO.
                                                                   DATE
     WO 2004071382
                         A2
                                20040826
                                            WO 2004-EP1097
                                                                   20040206
        W: AE, AE, AG, AL, AL, AM, AM, AT, AT, AU, AZ, AZ, BA, BB, BG,
            BG, BR, BR, BW, BY, BZ, BZ, CA, CH, CN, CN, CO, CO, CR, CR.
            CU, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EC, EE, EE, EG, ES,
            ES, FI, FI, GB, GD, GE, GE, GH, GM, HR, HR, HU, HU, ID, IL, IN,
            IS, JP, JP, KE, KE, KG, KG, KP, KP, KP, KR, KR, KZ, KZ, KZ, LC.
          · LK, LR, LS, LS, LT, LU, LV, MA, MD, MD, MG, MK, MN, MW, MX, MX,
            MZ. MZ. NA. NI
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RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU.

MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG PRIORITY APPLN. INFO.: EP 2003-3495

A 20030214 EP 2003-7594 A 20030402

OTHER SOURCE(S):

MARPAT 141:224070

GRAPHIC IMAGE:

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

ABSTRACT:

The title compound I and II [R1 = H, OH, methylcarbonyloxy; R2, R5 = cyclohexyl or cyclohexy-2-enyl, wherein cyclohexyl can be substituted with 0-2 hydroxy groups; R3, R6 = H or OH; R4 = H or OH; R7 = OH, cysteinyl, acetylaminoethylsulfanyl, methoxycarbonylethylsulfanyl, etc.] were prepared via fermentation of an Actinomycete of the genus Streptomyces and subsequently derivatized. Compds. I and II are useful as inhibitors of proteasomes for the treatment of proteasome-mediated diseases, such as asthma or cancer. For

example, compound III was isolated from the fermentation exts. and its structure was established by HPLC-MS and multi-dimensional NMR techniques. The latter showed an IC50 = 1 nM in the proteasome inhibition assay.

IT 744200-67-7P 744200-68-8P

RL: PAC (Pharmacological activity); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(Preparation of 6-oxa-2-azabicyclo[3.2.0]heptane-3,7-dione (salinosporamide) derivs. for inhibition of proteasomes and treatment of proteasome-mediated diseases)

RN 744200-67-7 CAPLUS

CN 6-0xa-2-azabicyclo[3.2.0]heptane-3,7-dione, 1-[(S)-(1S)-2-cyclohexen-1-ylhydroxymethyl]-4-(1-hydroxyhexyl)-5-methyl-, (1R,4R,5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 744200-68-8 CAPLUS

CN 6-0xa-2-azabicyclo[3.2.0]heptane-3.7-dione, 1-[(1R)-2-cyclohexen-1-ylmethyl]-4-hexyl-5-methyl-. (1R.4R.5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 744200-75-7P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(Preparation of 6-oxa-2-azabicyclo[3.2.0]heptane-3.7-dione (salinosporamide) derivs. for inhibition of proteasomes and treatment of

proteasome-mediated diseases)

RN 744200-75-7 CAPLUS

CN 6-Oxa-2-azabicyclo[3.2.0]heptane-3.7-dione, 1-[(S)-(acetyloxy)(1S)-2-cyclohexen-1-ylmethyl]-4-hexyl-5-methyl-, (1R,4R,5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 744200-66-6P

RL: PAC (Pharmacological activity); PRP (Properties); PUR (Purification or recovery); RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) (crystal structure; Preparation of 6-oxa-2-azabicyclo[3.2.0]heptane-3,7-dione (salinosporamide) derivs. for inhibition of proteasomes and treatment of proteasome-mediated diseases)

RN 744200-66-6 CAPLUS

CN 6-0xa-2-azabicyclo[3.2.0]heptane-3,7-dione, 1-[(S)-(1S)-2-cyclohexen-1-ylhydroxymethyl]-4-hexyl-5-methyl-, (1R,4R,5S)- (9CI) (CA INDEX NAME)

ANSWER 2 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2004:570502 CAPLUS

DOCUMENT NUMBER:

141:105361

TITLE:

Salinosporamides and methods for use thereof

INVENTOR(S):

Fenical, William; Jensen, Paul; Mincer, Tracy; Feling,

Robert H. R.

PATENT ASSIGNEE(S):

USA

SOURCE:

U.S. Pat. Appl. Publ., 26 pp.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 2004138196	A1	20040715	US 2003-600854		20030620
PRIORITY APPLN. INFO.:			US 2002-391314P	Ρ	20020624
OTHER COHROCE(C).	MADDAT	r 141.10F0C1			

OTHER SOURCE(S):

MARPA I 141:105361

ABSTRACT:

The present invention is based on the discovery that certain fermentation products of the marine actinomycete strains CNB392 and CNB476 are effective inhibitors of hyperproliferative mammalian cells. The CNB392 and CNB476 strains lie within the family Micromonosporaceae, and the generic epithet Salinospora has been proposed for this obligate marine group. The reaction products produced by this strain are classified as salinosporamides, and are particularly advantageous in treating neoplastic disorders due to their low mol. weight, low IC 50 values, high pharmaceutical potency, and selectivity for cancer cells over funai.

IT 437742-34-2P, Salinosporamide A

RL: BSU (Biological study, unclassified); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); PREP (Preparation) (salinosporamides and anticancer use thereof)

RN 437742-34-2 CAPLUS

CN 6-0xa-2-azabicyclo[3.2.0]heptane-3,7-dione, 4-(2-chloroethyl)-1-[(S)-[(1S)-1]2-cyclohexen-1-yl]hydroxymethyl]-5-methyl-, (1R,4R,5S)- (9CI) (CA' INDEX NAME) -

L4 ANSWER 3 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2

2004:340603 CAPLUS

DOCUMENT NUMBER:

CORPORATE SOURCE:

141:54117

TITLE:

A Simple Stereocontrolled Synthesis of Salinosporamide

А

AUTHOR(S):

Reddy, Leleti Rajender; Saravanan, P.; Corey, E. J. Department of Chemistry and Chemical Biology, Harvard

University, Cambridge, MA, 02138, USA

SOURCE:

Journal of the American Chemical Society (2004).

126(20), 6230-6231

CODEN: JACSAT; ISSN: 0002-7863

PUBLISHER:

American Chemical Society

DOCUMENT TYPE:

Journal English

LANGUAGE:
OTHER SOURCE(S):

CASREACT 141:54117

GRAPHIC IMAGE:

ABSTRACT:

A simple and effective stereocontrolled synthesis of salinosporamide A has been developed. Of special note is the direct conversion of amino(benzyloxymethyl)hydroxybutanoate I (R = H) to acryloyl derivative I (R = COCH:CH2). Also, quinuclidine proved to be superior to other bases in the cyclization of oxybutanoate II to oxopyrrolidinecarboxylate III. This process, the first synthesis of salinosporamide A, is capable of providing the compound in substantial quantities for further biol. studies. Salinosporamide A was of special interest as a synthetic target because of its potent in vitro cytotoxic activity against many tumor cell lines (IC50 values of 10 nM or less).

IT 437742-34-2P, Salinosporamide A RL: SPN (Synthetic preparation); PREP (Preparation)

(asym. synthesis of salinosporamide A)

RN 437742-34-2 CAPLUS

CN 6-0xa-2-azabicyclo[3.2.0]heptane-3,7-dione, 4-(2-chloroethyl)-1-[(S)-[(1S)-2-cyclohexen-1-yl]hydroxymethyl]-5-methyl-, (1R,4R,5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2003:101938 CAPLUS

DOCUMENT NUMBER:

139:81745

TITLE:

Salinosporamide A: a highly cytotoxic proteasome inhibitor from a novel microbial source, a marine

bacterium of the new genus Salinospora

AUTHOR(S):

Feling, Robert H.; Buchanan, Greg O.; Mincer, Tracy

J.; Kauffman, Christopher A.; Jensen, Paul R.:

Fenical, William

CORPORATE SOURCE:

Center for Marine Biotechnology and Biomedicine Scripps Institution of Oceanography, University of

California, La Jolla, CA, 92093-0204, USA

SOURCE:

Angewandte Chemie, International Edition (2003),

42(3), 355-357

CODEN: ACIEF5; ISSN: 1433-7851

PUBLISHER:

Wiley-VCH Verlag GmbH & Co. KGaA

DOCUMENT TYPE:

Journal

LANGUAGE:

English

ABSTRACT:

A member of the "Salinospora" group was examined and was found that strain CNB-392 produces the chemical unique and highly bioactive metabolite salinosporamide A. Salinosporamide A exhibits potent cancer cell cytotoxicity and appears to exert its cytotoxic effects through inhibition of the 20S proteasome. "Salinospora" strain CNB-392 was isolated from a heat-treated marine sediment sample that was plated on sea-water-based agar nutrient medium. Salinosporamide A appears to be a direct product of the fermentation rather than a subsequent transformation product of a precursor similar in structure to that of lactacystin. Salinosporamide A displayed potent in vitro cytotoxicity against HCT-116 human colon carcinoma with an IC50 value of 11 ng/mL. This compound also displayed potent and highly selective activity in the NCI's 60-cell-line panel with a mean GI50 value (the concentration required to achieve 50% growth inhibition) of less than 10 nM and a greater than 4 log LC50 differential between resistant and susceptible cell lines. The unique functionalization of the core bicyclic ring structure of salinosporamide A appears to have resulted in a mol. that is a significantly more potent proteasome inhibitor than omuralide.

IT 437742-34-2, Salinosporamide A

RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(salinosporamide A: highly cytotoxic proteasome inhibitor from novel microbial source, marine bacterium of new genus Salinospora)

RN 437742-34-2 CAPLUS

CN 6-0xa-2-azabicyclo[3.2.0]heptane-3.7-dione, 4-(2-chloroethyl)-1-[(S)-[(1S)-2-cyclohexen-1-yl]hydroxymethyl]-5-methyl-, (1R.4R.5S)- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 5 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2002:465746 CAPLUS

DOCUMENT NUMBER:

137:43910

TITLE:

Marine actinomycete taxon for drug and fermentation

product discovery

INVENTOR(S):

Fenical, William; Jenson, Paul R.; Mincer, Tracy J.

PATENT ASSIGNEE(S):

The Regents of the University of California, USA

SOURCE:

PCT Int. Appl., 30 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

1

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.		APPLICATION NO.	DATE
WO 2002047610 WO 2002047610	A2 20020620	WO 2001-US43758	20011116
CO, CR, CU, GM, HR, HU, LS, LT, LU,	CZ, DE, DK, DM, ID, IL, IN, IS, LV, MA, MD, MG,	BA, BB, BG, BR, BY, DZ, EC, EE, ES, FI, JP, KE, KG, KP, KR, MK, MN, MW, MX, MZ,	GB, GD, GE, GH, KZ, LC, LK, LR, NO, NZ, OM, PH,
UG, UZ, VN, RW: GH, GM, KE,	YU, ZA, ZW, AM, LS, MW, MZ, SD,	SI, SK, SL, TJ, TM, AZ, BY, KG, KZ, MD, SL, SZ, TZ, UG, ZM,	RU, TJ, TM ZW, AT, BE, CH,
BF, BJ, CF,	CG, CI, CM, GA,	GR, IE, IT, LU, MC, GN, GQ, GW, ML, MR,	NE, SN, TD, TG
	A5 20020624	CA 2001-2429163 AU 2002-43228	20011116
EP 1341414	A2 20030910	US 2001-991518 EP 2001-989109	20011116
IE, SI, LT,	LV, FI, RO, MK,		
JP 2004535766 PRIORITY APPLN. INFO.:	T2 20041202	JP 2002-549186 US 2000-249356P WO 2001-US43758	P 20001116

ABSTRACT:

The invention concerns the discovery of an actinomycete genus, given the name Salinospora gen. number, that displays an obligate requirement of the seawater (NA) for growth and unique 16S rRNA signature nucleotides. The invention is also the use of the genus for the production and discovery of active biomols, such as pharmaceutical agents, agrichems., immunomodifiers, enzymes and enzyme inhibitors.

ΙT 437742-34-2, Salinosporamide A

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL

(Biological study): USES (Uses)

(marine actinomycete taxon for drug and fermentation product discovery)

RN 437742-34-2 CAPLUS

2-cyclohexen-1-yl]hydroxymethyl]-5-methyl-, (1R,4R,5S)- (9CI) (CA INDEX NAME)

_4 ANSWER 6 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

1999:178063 CAPLUS

DOCUMENT NUMBER:

130:296964

TITLE:

The structural requirements for inhibition of proteasome function by the lactacystin-derived

 β -lactone and synthetic analogs

AUTHOR(S):

Corey, E. J.; Li, Wei-Dong Z.; Nagamitsu, Tohru;

Fenteany, Gabriel

CORPORATE SOURCE:

Department of Chemistry and Chemical Biology, Harvard

University, Cambridge, MA, 02138, USA

SOURCE:

Tetrahedron (1999), 55(11), 3305-3316

CODEN: TETRAB: ISSN: 0040-4020

PUBLISHER:

Elsevier Science Ltd.

DOCUMENT TYPE:

Journal

LANGUAGE:

English

ABSTRACT:

The synthesis of analogs of clasto-lactacystin β -lactone in which the substituents at C(5), C(7) and C(9) were systematically varied has led to a well defined structure-activity correlation for the highly selective inhibition of the mammalian 20 S proteasome.

IT 223246-07-9P

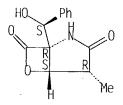
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(structural requirements for inhibition of proteasome function by lactacystin-derived β -lactone and synthetic analogs)

RN 223246-07-9 CAPLUS

CN 6-0xa-2-azabicyclo[3.2.0]heptane-3,7-dione, 1-[(S)-hydroxyphenylmethyl]-4-methyl-, (1R,4R,5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT:

THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

1997:12301 CAPLUS

DOCUMENT NUMBER:

126:50959

TITLE:

Lactacystin analogs for inhibition of proteasomes and

treatment of proteasome-mediated diseases

INVENTOR(S):

Schreiber, Stuart L.; Standaert, Robert F.; Fenteany,

Gabriel: Jamison, Timothy F.

PATENT ASSIGNEE(S):

President and Fellows of Harvard College, USA

SOURCE:

PCT Int. Appl., 165 pp.

_ _ _ _ _ _

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

DATENT NO

		APPLICATION NO.	DATE
		WO 1996-US5072	19960412
W: AL, AM, AT,	AU, AZ, BB, BG,	BR, BY, CA, CH, CN, CZ,	DE, DK, EE,
ES, FI, GB,	GE, HU, IS, JP,	KE, KG, KP, KR, KZ, LK,	LR, LS, LT,
LU, LV, MD,	MG, MK, MN, MW,	MX, NO, NZ, PL, PT, RO.	RU, SD, SE,
SG, SI			
RW: KE, LS, MW,	SD, SZ, UG, AT,	BE, CH, DE, DK, ES, FI,	FR, GB, GR,
IE, IT, LU.	MC, NL, PT, SE,	BF, BJ, CF, CG, CI, CM,	GA, GN
US 6335358	B1 20020101	US 1995-421583	19950412
US 5756764	A 19980526	US 1995-466468	19950606
US 6147223		US 1995-468408	19950606
CA 2217817	AA 19961017	CA 1996-2217817	19960412
AU 9655423	A1 19961030	AU 1996-55423	19960412
AU 705791			
ZA 9602933	A 19970203	ZA 1996-2933	19960412
		EP 1996-912710	
R: AT, BE, CH,	DE, DK, ES, FR,	GB, GR, IT, LI, LU, NL,	SE, MC, PT,
IE. FI			
CN 1187769			
JP 11503732			
US 6645999			
US 6214862			
US 6458825		US 2000-639242	20000815
US 2003119887	A1 20030626		
PRIORITY APPLN. INFO.:		US 1995-421583	A1 19950412
		WO 1996-US5072	
		US 1998-945092	A1 19980126

OTHER SOURCE(S):

MARPAT 126:50959

ABSTRACT:

Compds. related to lactacystin and lactacystin β -lactone pharmaceutical

compns. containing the compds., and methods of their preparation and use in treatment of proteasome-mediated diseases are claimed.

IT 183873-83-8P

RL: PNU (Preparation, unclassified); THU (Therapeutic use); BIOL

(Biological study); PREP (Preparation); USES (Uses)

(preparation of lactacystin analogs for inhibition of proteasomes and

treatment of proteasome-mediated diseases)

RN 183873-83-8 CAPLUS

CN 6-0xa-2-azabicyclo[3.2.0]heptane-3,7-dione, 1-(hydroxyphenylmethyl)-, [1R-[1 α (S*),5 α]]- (9CI) (CA INDEX NAME)

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(FILE 'HOME' ENTERED AT 11:30:18 ON 21 DEC 2004)

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L2
L3
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L4
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            303 S E3-E4
L5
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             95 S E3
L6
               E MINCER TRACY/AU
L7
             9 S E3-E4
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E FELING ROBERT/AU

3 S E3-E5

L8 3 S E3-E5

L9 400 S L5 OR L6 OR L7 OR L8

L10 3 S L9 AND SALINO?

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· a que	. 110 30	46		
L5	303	SEA FILE=CAPLUS ABB	=ON PLU=ON	("FENICAL WILLIAM"/AU OR
		"FENICAL WILLIAM H"	/AU)	
L6	95	SEA FILE=CAPLUS ABE	=ON PLU=ON	"JENSEN PAUL"/AU
L7	9	SEA FILE=CAPLUS ABE	=ON PLU=ON	("MINCER TRACY"/AU OR "MINCER
		TRACY J"/AU)		
L8	3	SEA FILE=CAPLUS ABB	=ON PLU=ON	("FELING ROBERT"/AU OR "FELING
		ROBERT H"/AU OR "FE	LING ROBERT	H R"/AU)
L9	400	SEA FILE=CAPLUS ABE	=ON PLU=ON	L5 OR L6 OR L7 OR L8

3 SEA FILE=CAPLUS ABB=ON PLU=ON L9 AND SALINO?

L10

 $[\]Rightarrow$ d 1-3 ibib iabs

L10 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2004:570502 CAPLUS

DOCUMENT NUMBER:

141:105361

TITLE:

Salinosporamides and methods for use thereof

INVENTOR(S):

Fenical, William: Jensen, Paul: Mincer, Tracy; Feling, Robert H. R.

PATENT ASSIGNEE(S):

SOURCE:

U.S. Pat. Appl. Publ., 26 pp.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
· US 2004138196	A1	20040715	US 2003-600854	20030620
PRIORITY APPLN. INFO.:			US 2002-391314P P	20020624
OTHER SOURCE(S):	MARPAT	141:105361		

ABSTRACT:

The present invention is based on the discovery that certain fermentation products of the marine actinomycete strains CNB392 and CNB476 are effective inhibitors of hyperproliferative mammalian cells. The CNB392 and CNB476 strains lie within the family Micromonosporaceae, and the generic epithet Salinospora has been proposed for this obligate marine group. The reaction products produced by this strain are classified as salinosporamides, and are particularly advantageous in treating neoplastic disorders due to their low mol. weight, low IC 50 values, high pharmaceutical potency, and selectivity for cancer cells over fungi.

L10 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2003:101938 CAPLUS

DOCUMENT NUMBER:

139:81745

TITLE:

Salinosporamide A: a highly cytotoxic

proteasome inhibitor from a novel microbial source, a

marine bacterium of the new genus Salinospora

AUTHOR(S):

Feling, Robert H.; Buchanan, Greg O.;

Mincer, Tracy J.; Kauffman, Christopher A.;

Jensen, Paul R.: Fenical, William

CORPORATE SOURCE:

Center for Marine Biotechnology and Biomedicine

Scripps Institution of Oceanography, University of

California, La Jolla, CA, 92093-0204, USA

SOURCE:

Angewandte Chemie, International Edition (2003),

42(3), 355-357

CODEN: ACIEF5; ISSN: 1433-7851

PUBLISHER:

Wiley-VCH Verlag GmbH & Co. KGaA

DOCUMENT TYPE:

Journal

LANGUAGE:

English

ABSTRACT:

A member of the "Salinospora" group was examined and was found that strain CNB-392 produces the chemical unique and highly bioactive metabolite ***salinosporamide*** A. Salinosporamide A exhibits potent cancer cell cytotoxicity and appears to exert its cytotoxic effects through inhibition of the 20S proteasome. "Salinospora" strain CNB-392 was isolated from a heat-treated marine sediment sample that was plated on sea-water-based agar nutrient medium. Salinosporamide A appears to be a direct product of the fermentation rather than a subsequent transformation product of a precursor similar in structure to that of lactacystin. Salinosporamide A displayed potent in vitro cytotoxicity against HCT-116 human colon carcinoma with an IC50 value of 11 ng/mL. This compound also displayed potent and highly selective activity in the NCI's 60-cell-line panel with a mean GI50 value (the concentration required to achieve 50% growth inhibition) of less than 10 nM and a greater than 4 log LC50 differential between resistant and susceptible cell lines. The unique functionalization of the core bicyclic ring structure of ***salinosporamide*** A appears to have resulted in a mol. that is a significantly more potent proteasome inhibitor than omuralide.

REFERENCE COUNT:

11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2002:465746 CAPLUS

DOCUMENT NUMBER:

137:43910

TITLE:

Marine actinomycete taxon for drug and fermentation

product discovery

INVENTOR(S):

Fenical, William; Jenson, Paul R.;

Mincer, Tracy J.

PATENT ASSIGNEE(S):

The Regents of the University of California, USA

SOURCE:

PCT Int. Appl., 30 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE
	A2 20020620	WO 2001-US43758	20011116
CO, CR, CU, GM, HR, HU,	CZ, DE, DK, DM, ID, IL, IN, IS,	BA, BB, BG, BR, BY, DZ, EC, EE, ES, FI, G JP, KE, KG, KP, KR, D	GB, GD, GE, GH, KZ, LC, LK, LR,
PL, PT, RO, UG, UZ, VN,	RU, SD, SE, SG, YU, ZA, ZW, AM,	MK, MN, MW, MX, MZ, I SI, SK, SL, TJ, TM, AZ, BY, KG, KZ, MD, I	TR, TT, TZ, UA, RU, TJ, TM
CY, DE, DK,	ES, FI, FR, GB,	SL, SZ, TZ, UG, ZM, 1 GR, IE, IT, LU, MC, I GN, GQ, GW, ML, MR, I	NL, PT, SE, TR,
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R: AT, BE, CH,	DE, DK, ES, FR,	GB, GR, IT, LI, LU, I	NL, SE, MC, PT,
IE, SI, LT,	LV, FI, RO, MK,	CY, AL, TR	
JP 2004535766	T2 20041202	JP 2002-549186	
PRIORITY APPLN. INFO.:		US 2000-249356P WO 2001-US43758	

The invention concerns the discovery of an actinomycete genus, given the name ***Salinospora*** gen. number, that displays an obligate requirement of the seawater (NA) for growth and unique 16S rRNA signature nucleotides. The invention is also the use of the genus for the production and discovery of active biomols. such as pharmaceutical agents, agrichems., immunomodifiers, enzymes and enzyme inhibitors.